

REMARKS / ARGUMENTS

Claims 9-22 remain pending in this application. Claims 1-8 have been canceled without prejudice or disclaimer. No new claims have been added.

Priority

Applicants appreciate the Examiner's acknowledgment of the claim for priority and safe receipt of the priority document.

Drawings

Each of the Examiner's drawing objections is addressed in the order presented in the Office Action:

Regarding Item (2) of the Office Action, Applicants have amended claim 9 to recite "a sample loading unit" instead of the objected to "sample supply unit" and to recite "a first rack rotor and a second rack rotor" instead of the objected to "sample buffer arrangement. " Support for the claim amendments will be discussed in detail later in this paper.

Regarding Item (3) of the Office Action, the drawings have further been objected to under 37 C.F.R. 1.84(p)(4) because reference characters 31, 32, 33 of Fig. 7 have been used to designate the "independent lines", "second buffer unit entrance", and "third line switching unit" respectively, and reference characters 31,

32, 33 are used in the specification to also refer to the "second buffer unit". Also, the drawings have been objected to because reference characters 34, 35, and 36 of Fig. 8 have been used to designate the "line", "line entrance", and "sample rack delivery exits" respectively, while reference characters 34, 35, and 36 are used in the specification to also refer to the "second buffer unit. " Although it is submitted that one of ordinary skill in the art would understand that the first and second buffer units include various portions that are individually described, in order to expedite prosecution, the objected to reference numerals have been removed from the specification.

No new matter has been added.

Specification

The specification has been objected to for failing to provide proper antecedent basis for the claimed subject matter, specifically the "sample supply unit" of claim 9. Applicants have amended claim 9 to recite "sample loading unit" instead of "sample supply unit". " Additionally, Applicants have further amended claim 9 to recite "first rack rotor and second rack rotor" instead of "sample buffer arrangement". Support for the claim amendments will discussed in detail later in this paper.

35 U.S.C. §112 and Claim Objections

Claims 14-22 have been appropriately amended to clearly reference the claim from which they depend as required by the Examiner.

Claims 9-22 stand rejected under 35 U.S.C. §112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Independent claim 9 has been amended to recite "sample loading unit" instead of "sample supply unit". Claim 9, as currently amended, now recites "sample loading unit" instead of "sample supply unit". Claim 10 still includes the limitation "urgent sample loading unit". Therefore, with the removal of "sample supply unit" from claim 9, claim 9 is now in better form under 35 U.S.C. §112.

35 U.S.C. §102

Claims 9-22 stand rejected under 35 U.S.C. §102(b) as being anticipated by Mimura (U.S. Patent No. 6,080,364). Claims 9-13 stand rejected under 35 U.S.C. §102(b) as being anticipated by Takahashi et al (U.S. Patent No. 6,290,907). These rejections are traversed as follows.

The present invention is directed to an automatic analyzer for carrying out quantitative/qualitative analysis of living body samples wherein the automatic analyzer is flexibly operable to adapt to dealing with the analysis of urgent samples. As currently amended, the automatic analyzer of claims 9-22 comprises an analytical module for analyzing samples, where the samples are specifically living body samples. The automatic analyzer has a sample loading unit for supplying the samples and a sample collection unit for collecting the samples. A conveyor unit for conveying sample racks with samples to be analyzed from the sample loading unit to

the analytical module is also included. The conveyor unit also conveys sample racks with samples, which have completed sampling, from the analytical module to the sample collection unit. The automatic analyzer further has a first rack rotor and a second rack rotor arranged on the conveyor unit for receiving samples from the sample loading unit, and holds and supplies desired samples to the analytical module. The first rack rotor and second rack rotor receive samples returned from the analytical module and supply returned samples to the sample collection unit. The first and second rack rotor comprise at least two buffers including a first buffer at one end of the conveyor unit for receiving samples from the sample loading unit, holding them and supplying desired samples to the conveyor unit to be conveyed to the analytical module. The second buffer is disposed at the other end of the conveyor unit for holding samples whose sampling has been completed and returning samples to be re-analyzed to the analytical module and sample collection unit.

Claim 9 has been amended to positively recite a line switching unit for switching conveyor lines of the conveyor unit to transfer samples for which sampling has been completed to the second rack rotor to wait for analysis results and to evacuate samples still to be subjected to sampling to the first rack rotor if another sample requiring urgent analysis is presented. The first rack rotor is adapted to supply the sample requiring urgent analysis to the analytical module via the conveyor unit from which samples have been evacuated. Therefore, according to the present invention, the automatic analyzer can shorten the waiting time until analysis of

samples, particularly the waiting time until analysis of samples requiring urgent analysis.

Support for the amendments to claim 9 are as follows. The previous limitation of "sample supply unit" has been amended to recite "sample loading unit". See the Specification at pg. 6, lines 12-26. As presently claimed, the conveyor unit for conveying sample racks with samples 13 conveys the samples along at least one convention line 6, 9, as shown for example with reference to Fig. 1. Additionally, the previous limitation of sample buffer arrangement has been amended to recite "a first rack rotor" 7 and "a second rack rotor" 12, as depicted for example in Fig. 1. Furthermore, support for the "line switching unit" 11 for switching conveyor lines is provided with reference to the embodiment depicted in Fig. 1 for example. See the Specification at pg. 8, lines 11-19.

Regarding claim 10, Applicants note that claim 10 is distinguishable from claim 9 due to the replacement of sample supply unit with sample loading unit. With reference to Fig. 1 as an example, the urgent sample loading unit of claim 10 corresponds with reference character 5. Furthermore, the sample loading unit of claim 9 corresponds with reference character 3. The sample loading unit and urgent sample loading unit are not the same element. See Specification at pg. 6, lines 12-25.

Mimura is relied upon for disclosing an automatic analyzer system comprising a plurality of analytical modules for analyzing living body samples, a sample supply unit for supplying samples to the sample buffer and a sample collection unit for

collecting samples from the sample buffer. Mimura is further relied upon for disclosing a conveyer unit for conveying sample racks to and from the analytical modules.

However, Mimura instead discloses an automatic analyzer for analyzing components of biological samples and refers to the effective operation and management of calibration and accuracy management. See col. 1, lines 6-11. Mimura is silent with respect to disclosing the structural element of a line switching unit for switching conveyor lines of a conveyor unit to transfer samples to a second rack rotor for the samples to wait for analysis results, and to evacuate samples still to be subjected to sampling to a first rack rotor if another sample requiring urgent analysis is presented.

Furthermore, Mimura is silent with respect to disclosing a first rack rotor and a second rack rotor arranged on the conveyer unit, where the first rack rotor and second rack rotor comprise at least two buffers including a first buffer disposed at one end of the conveyor unit for receiving samples and a second buffer for holding samples for which sampling has been completed, returning samples to be re-analyzed to an analytical module and returning samples to be re-analyzed to the sample collection unit.

Takahashi is also relied upon for disclosing an automatic analyzer system comprising a plurality of analytical modules for analyzing a living body sample, a sample buffer arrangement comprising a plurality of buffers capable of holding a plurality of samples, supplying the samples to the conveyor unit, and receiving

samples from the analytical unit. Takahashi is further relied upon for disclosing a sample supply unit for supplying samples to a sample buffer and for disclosing a conveyor unit for conveying samples to and from the analytical module.

However, Takahashi instead is related to a sample handling system which is capable of allowing other sample handling units to function even if a sample handling unit fails and to allow the sample handling process to detour failed sample handling units. See col. 2, lines 14-26. Takahashi fails to disclose the structural element of a line switching unit for switching conveyor lines of a conveyor unit to transfer samples to a second rack rotor for the samples to wait for analysis results, and to evacuate samples still to be subjected to sampling to a first rack rotor if another sample requiring urgent analysis is presented.

Applicants note that the present invention relates not only to an automatic analyzer capable of performing analysis on living body samples, such as blood and urine, but also to an analyzer that is flexibly operable to analyze urgent samples. More specifically, the line switching unit evacuates samples still to be subjected to sampling to the first rack rotor if another sample requiring urgent analysis is presented and the sample requiring urgent analysis is supplied to the analytical module via the conveyor unit from which the samples have been evacuated to the first rack rotor. Thus, the automatic analyzer is able to process urgent samples by conveying and analyzing urgent samples in the analysis unit with priority over sample racks conveyed from the general sample loading unit. See Specification at pg. 6, lines 21-25. Accordingly, neither Mimura nor Takahashi anticipate the invention as

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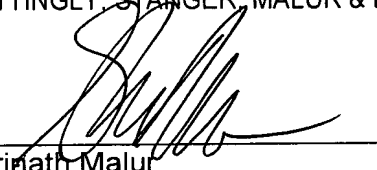
set forth in claims 9-22. As such, Applicants submit that the pending claims patentably define over the cited prior art.

Conclusion

In view of the foregoing, Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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